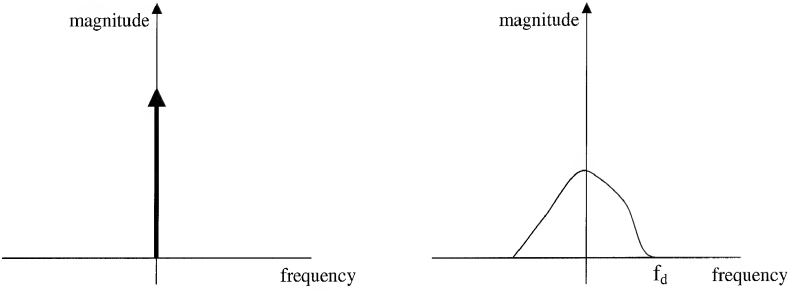
magnitude
frequency
signal as transmitted
A
magnitude
f_d
frequency
signal as received
B

FIGURE 1

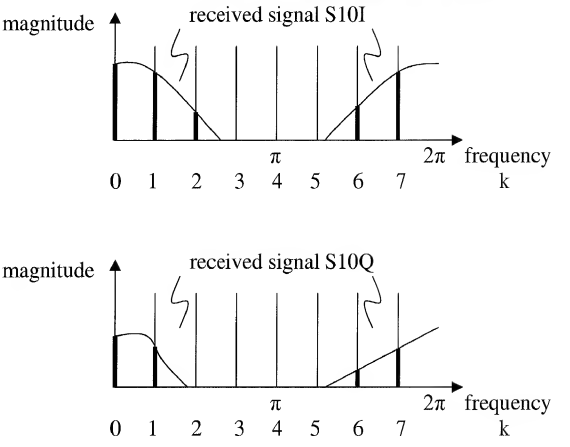
magnitude
received signal S10I
π
2π
frequency
0 1 2 3 4 5 6 7
k
magnitude
received signal S10Q
π
2π
frequency
0 1 2 3 4 5 6 7
k

FIGURE 2

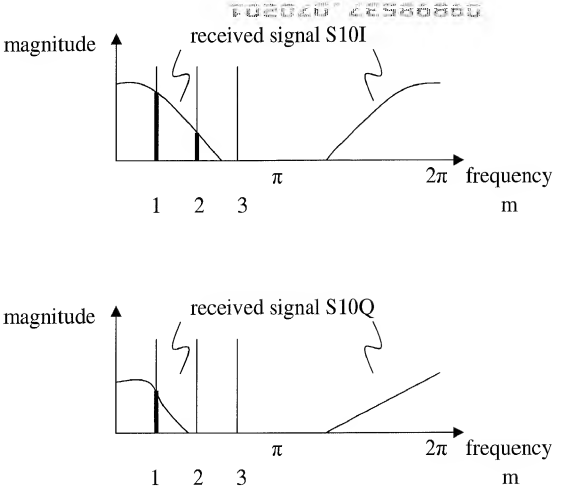
magnitude
received signal S10I
π
2π
frequency
1
2
3
m
magnitude
received signal S10Q
π
2π
frequency
1
2
3
m

FIGURE 3

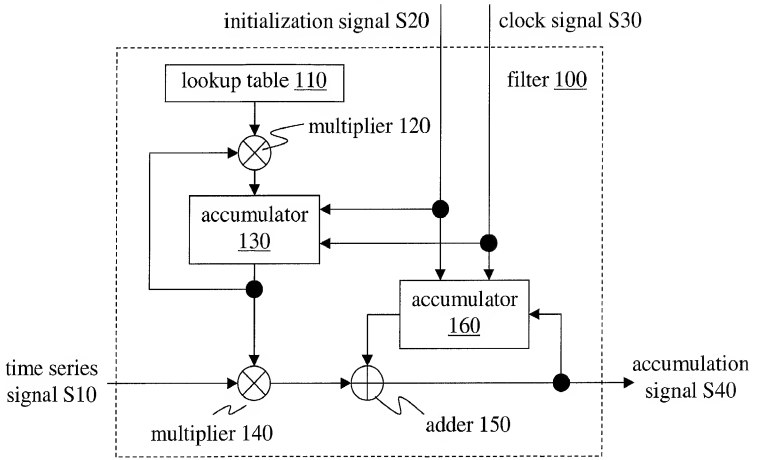
initialization signal S20
clock signal S30
lookup table 110
filter 100
multiplier 120
accumulator 130
accumulator 160
time series signal S10
accumulation signal S40
multiplier 140
adder 150

FIGURE 4

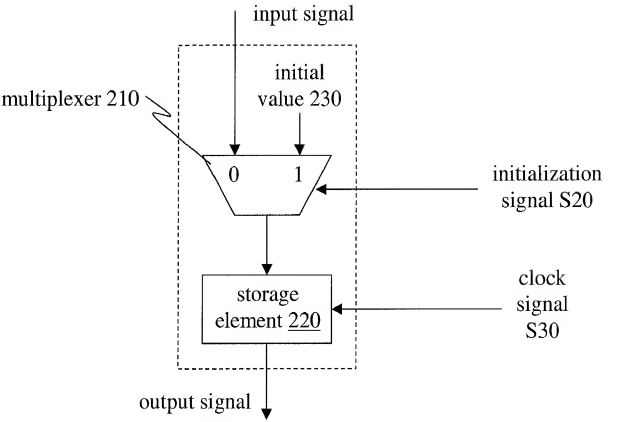
input signal
initial
value 230
multiplexer 210
0
1
initialization
signal S20
storage
element 220
clock
signal
S30
output signal

FIGURE 5

FOREIGN PATENT

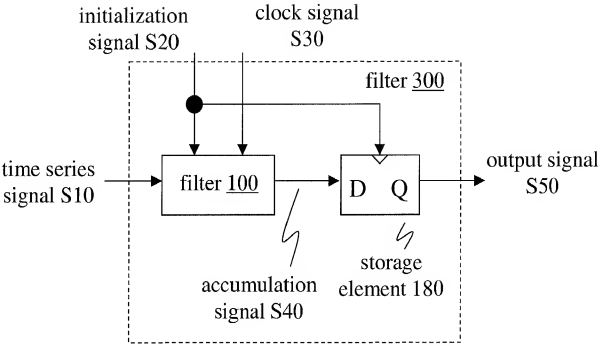

FIGURE 6

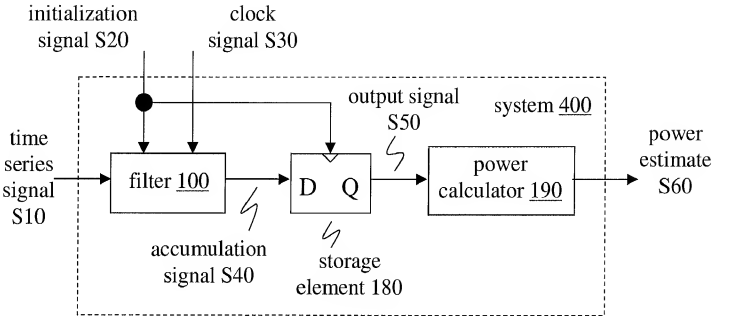
initialization signal S20
clock signal S30
output signal S50
system 400
time series signal S10
filter 100
D Q
power calculator 190
power estimate S60
accumulation signal S40
storage element 180

FIGURE 7

TW201207486B

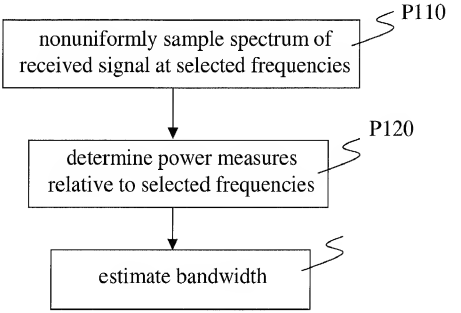

FIGURE 8

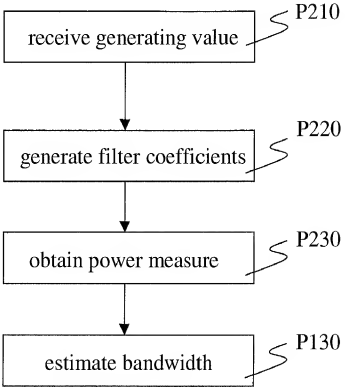
receive generating value
P210
generate filter coefficients
P220
obtain power measure
P230
estimate bandwidth
P130

FIGURE 9

P02020 ·2258888

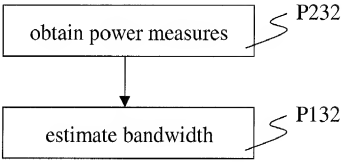

FIGURE 10A

P020070 26566560

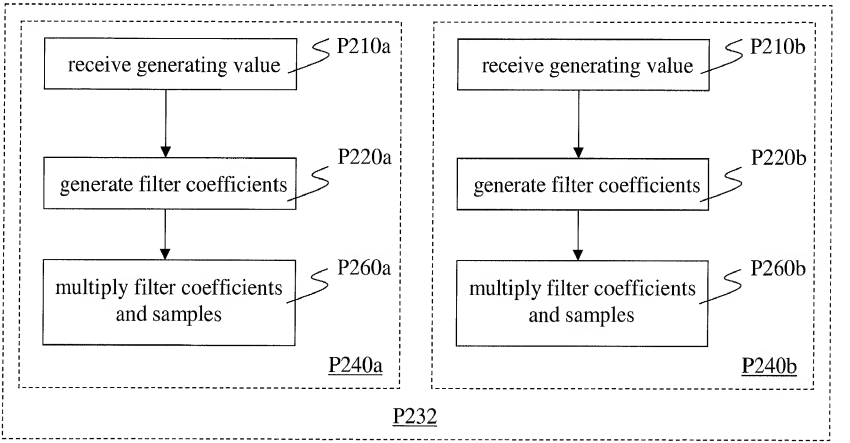

FIGURE 10B

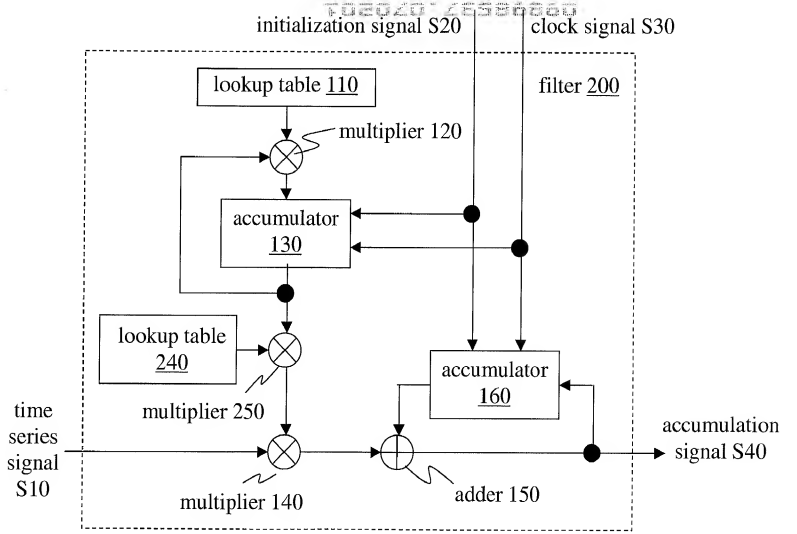
initialization signal S20
clock signal S30
filter 200
lookup table 110
multiplier 120
accumulator 130
lookup table 240
multiplier 250
accumulator 160
time series signal S10
multiplier 140
adder 150
accumulation signal S40

FIGURE 11

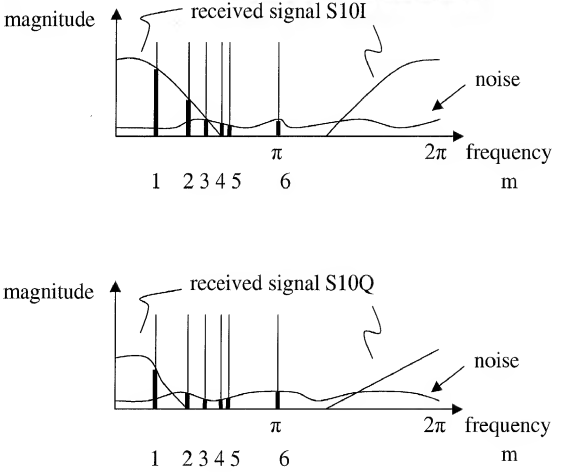
magnitude
received signal S10I
noise
π
2π
frequency
1 2 3 4 5 6
m
magnitude
received signal S10Q
noise
π
2π
frequency
1 2 3 4 5 6
m

FIGURE 12